

# [PIXEL ARRAY]

## Abstract

A pixel array comprising a plurality of pixel structures is disclosed. Each pixel structure at least comprises a sub-pixel and a shadow pixel. The shadow pixel is positioned on one side of the sub-pixel. The shadow pixel is capable of producing electromagnetic radiation in the invisible portion of the electromagnetic spectrum. Through proper setting of shadow pixels, the pixel array can be divided into areas having different digital codes and a sensor can be used to pick up the electromagnetic radiation from the shadow pixels to find the location emitting the digital codes. Thus, the pixel array can be used in a non-touch panel input device.